WANTED

REWARD $ 1,000,000,000
Dead or Alive
For Crimes Against Computers
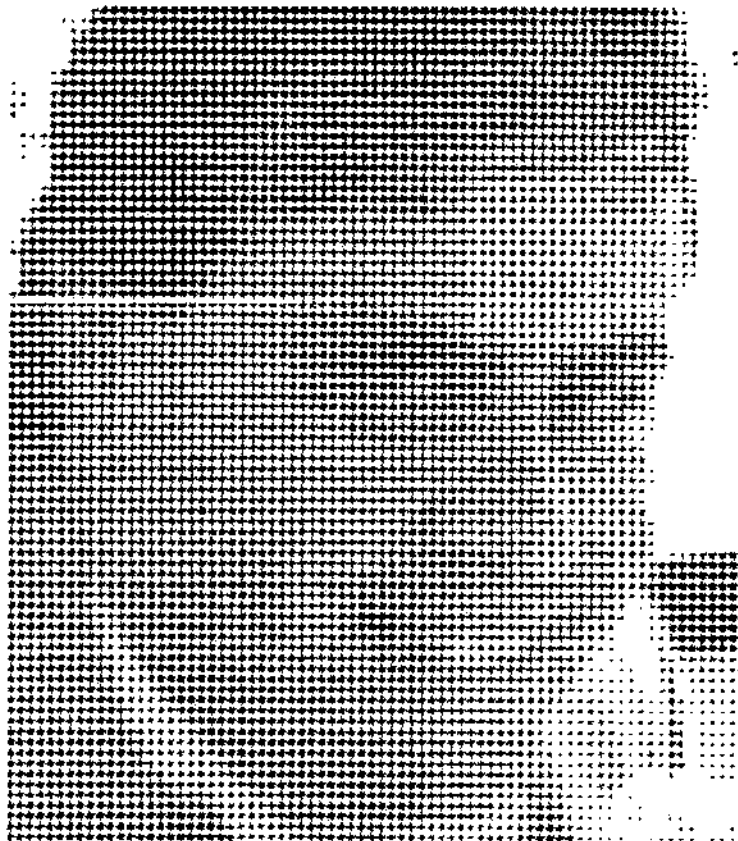
WARNING - If you recognise suspect, DO NOT APPROACH.
As long as he has arms, he is DANGEROUS.

Inside This Issue...

★ *Stoned!*
★ PC - 91
★ Upgrading DOS
★ DOS Tips

Input/Output is the publication of the Latrobe Valley Computer Users Group. It is published monthly.

Members are encouraged to contribute material for the Newsletter, in ASCII format, if possible. It can be uploaded to a BBS ((051) 22 2122) or submitted to the editor at 12 Clift St., Traralgon 3844 (Phone 76 1730). "Letters to the Editor" should be posted to the same address.

We accept classified advertisements for inclusion in the classified section. There will be no charge to members for ads of a noncommercial nature. Commercial ads will be accepted for a nominal charge (see Classified page for more information), and the advertiser must state clearly the expected remuneration for any products or services offered. The Latrobe Valley Computer Users Group does not endorse or recommend any products or services included in commercial classified advertisements.

Please note that material published in the Newsletter represents the opinions of the authors, and does not carry the endorsement of the Newsletter Editor or the Latrobe Valley Computer Users Group.

The Latrobe Valley Computer Users Group is a non-profit organisation formed to promote the usage and understanding of Personal Computers. It is open to all age groups and does not discriminate on the basis of race, sex, age, creed, or national origin.

The Group meets monthly on the last Tuesday of each month at 7:30 p.m. at the Traralgon Senior Citizens Club building, corner of Princes Hwy. and Whittaker's Rd. (Victory Park), Traralgon. Meetings are open to the public.

Family membership is $10 per year. This entitles members to receive the monthly Newsletter by mail, as well as the right to use the Group's "Help Lines". We request a donation of $2 each meeting per family to help cover costs (venue fees, coffee and tea, etc.).

For more information, ring 74 6199 BH, 76 1730 AH.

? ? ☎ ? ?

PHONE HELP

Some members of the LVCUG have offered to assist other members with PC related problems over the telephone (evenings, please). They are:

Phil Carter	22 2382
Paul Dzwonkowski	63 1504
Ralph Edgar	74 0987
Graeme Matheson	74 9419
Trevor Smith (Apple)	34 4332
Martin Taylor	76 1730

The Committee of Management Consists of the Following:

Phil Carter..............................President

Martin Taylor.............Vice President

Theresa Tate.......................Secretary

Paul Dzwonkowski......Asst. Secretary

Graeme Matheson..............Treasurer

Sheryl Taylor........Newsletter Editor

Ross Cheater....Committee Member

Jenny Poon........Committee Member

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From The Editor's Desk

Hello again, and thank goodness for spring (although judging from all the rain and today's hailstorm, one would never guess it).

I apologise for the lateness of this month's Newsletter, but I was away for 5 weeks and only returned the day before the last meeting. It was such a shock to come back to the cold! Many people in the northern hemishpere, the US especially, think of Australia as a Tropical Paradise, or the Outback. I corrected those who were ill-informed.

One thing, though, as my husband said, "The prices the Yanks pay will make you cry". I have been told that there is no import duty on software. If that is true, why is software in Australia often double the price it is in the US? I understand that the way copyright laws are set up here, all books and the like come from one source, Great Britain. So naturally, they can charge us whatever they want to. It is most distressing when decent Software help manuals and programming aids cost $50 to $75 and more. I would suggest a letter or two to our MPs would be in order in this case.

Marty and I went out looking for a particular refrigerator a couple of months ago, the type with the ice dispenser through the door. We were quoted a price of around $4,000, so we decided to wait (until pigs grow wings). While o/s, I priced them. They cost between $897 - $1297. Now, even if I take into account the differences in the Australian and US dollars, and take into account the higher Australian labor and transportation costs, and the fact that those fridges sold in Australia are made here, there is no way I can justify $4,000. $2,000, $2,500 maybe. But, someone is gouging us. I, for one, would like to know who.

Anyway, I am getting off track a bit here. My main gripe at this time is the deal with the books. I recall going to a bookstore on Elizabeth Street some months ago and looking at books in the Computer section. My eyeballs were just about falling out of my head! All I wanted was to buy a book on Desktop Publishing, not shares in the publishing house!

Maybe I am not getting through to any of you yet. Just remember, next time you buy a paperback book and pay $11, $12 or $13, remember that the Yanks get them for $ 4.95. Then, maybe, you will go home and write a letter to your MP.■

President's Report

Well, another month has gone by and our membership has passed the 100 mark. This, with the success with our Shareware Library, Disk Sales, Education Classes, Help Line and many other services, has seen our group has grown into a substantial organisation. As the group has given the committee the authority to purchase an AT computer for the group, we shall now try to obtain the best deal available to us. We are mindful that our bank account is not a bottomless pit, so we shall do our best.

I've noticed of late that not many members contribute to the demonstrations at the meetings. To date approx 8% of the membership have done demo's. When talking to members, I am constantly told that "I would but I don't like moving my computer" or "I don't think I have anything to offer". This is nonsense. A demo does not always require you to bring hardware. You can bring in Software with manuals, or books that may explain the operation of a Software package. Maybe you have a good introduction to computers or DOS book. These all will be of interest to some other members.

One of the main aims of this group is to provide a forum for the exchange of information, news and ideas on computing. The forum is there. I urge all members of the group to take advantage of it.

Hope to see you all at the next meeting.■

Phil Carter
President

Stoned!

Have you ever been stoned, I mean really stoned? Well I have, twice to be precise. No, no, not the dope type, the virus type. The first time for me was a couple of years ago. On that occasion I received a disk in the mail from a mate, who lives in N.S.W. The disk he sent me contained the latest and most up todate virus protection program on the market.

Yes, you guessed it. It also contained the STONED virus. It did take me couple of hours to find out though, and in that time I managed to infect my hard disk drive and about ten or so floppies. But I did learn a valuable lesson - *SCAN EVERY FOREIGN DISK AS SOON AS IT ENTERS YOUR DRIVE.*

The second time was the other day. Well, almost. This time I found it first. I was given a box of disks to copy for a member. This time I remembered the golden rule and scanned the disks first. Lucky me. Unlucky member. How many infected disks has he got? " Lots. "

As most of you know, I like pulling things apart and seeing how they work. Viruses included. This is what I can tell you about the STONED virus, boot sectors, and McAfee Associates virus killer CLEAN.

First, lets look at what happens at boot up time. After POST (Power On Self Test) has been completed, the bootstrap loader interrupt 19 attempts a Boot Record load. It first searches drive A: sector zero for a valid Boot Record. If not found, it then searches the active partition table of the hard drive. When found, the Boot Record is loaded into memory at address 7C00:0 and given control.

In other words, the program that lives in the first sector of the first disk that is read gets control of your computer. If it happens to be a virus, you are in trouble. This is how the stoned virus works. It hides itself in the boot sector of a floppy and if by chance you try to boot off that floppy, by design or by accident (leaving the disk drive door closed at boot time) it is the first program loaded into memory and executed.

Its first job is to copy itself to the partition table of the hard drive. Once there, it returns the message " Non-system disk Replace and strike ". It then halts and waits for you to reboot the machine. Of course without question, you do as you are told. Stoned is now the first program read from the hard drive and is sent memory resident. There, it lurks and waits. Any time a disk is read or written to, it copies itself to the boot sector of that disk.

As you can see, it would take no time at all to infect all the floppies you have. What the Stoned virus does when it has been around in your system for a while, I do not know, as my knowledge of assembler language is somewhat limited. I do know that once you have woken up to fact that you are infected, your problems are just starting.

Lets take a closer look at the boot sector of a disk. We can do this by using my old mate DEBUG. If you do not know what DEBUG is or what is does, leave this alone, as we are going to do absolute read and writes of disk sectors (very dangerous stuff for beginners).

After placing a formated disk in drive A: and making sure DEBUG is on the current path, we can issue the following commands:

DEBUG

This will load DEBUG and we will be greeted by a - sign.

L 0 0 0 1

The L is Debugs command for LOAD. The first zero tells Debug to load it at OFFSET :0000. The second zero tells Debug to load it from Drive A: (remember that Debug starts counting at zero). So A = 0, B = 2, C = 3 and so on. The third zero is the sector number to be loaded . The one is how many sectors to load.

D 0

The D tells Debug to DISPLAY. The zero tells it to start at OFFSET :0000. As we have not told it how much to display, Debug will display eight paragraphs of memory. (Eight lines of information). It will look something like the following:

```
2DE0:0000  EA 05 00 C0 07 E9 99 00-00 1A 05 00 C8 E4 00 80   . . . . . . . . . . . . . . . .
2DE0:0010  9F 00 7C 00 00 1E 50 80-FC 02 72 17 80 FC 04 73   . . : . . . P . . . r . . . . s
2DE0:0020  12 0A D2 75 0E 33 C0 8E-D8 A0 3F 04 A8 01 75 03   . . . u . 3 . . . . ? . . . u .
2DE0:0030  E8 07 00 58 1F 2E FF 2E-09 00 53 51 52 06 56 57   . . . x . . . . . . SQR VW
2DE0:0040  BE 04 00 B8 01 02 0E 07-BB 00 02 33 C9 8B D1 41   . . . . . . . . . . . 3 . . . A
2DE0:0050  9C 2E FF 1E 09 00 73 0E-33 C0 9C 2E FF 1E 09 00   . . . . . . s . 3 . . . . . . .
2DE0:0060  4E 75 E0 EB 35 90 33 F6-BF 00 02 FC 0E 1F AD 3B   Nu . . 5 . 3 . . . . . . . . ;
2DE0:0070  05 75 06 AD 3B 45 02 74-21 B8 01 03 BB 00 02 B1   . u . . ;E. t ! . . . . . . .
```

The first two bytes is a JUMP instruction. It tells the CPU to jump over some information stored in the next few paragraphs. If you don't believe me, enter the following command:

U 0 L3

The U tells Debug to UNASSEMBLE. The zero tells it to start at OFFSET :0000 and the L3 tells it to do it for the LENGTH of 3 bytes.

Believe me now?! What was this information that we just jumped? Well, beginning at OFFSET 3H we have the system ID. This reflects what formatter formatted the disk. In this case, MSDOS3.3. You may have something different (eg. PCTOOLS would have PCFormat, NORTONS would have IBM PNCI and so forth). After this we have information about the disk's format. See fig 1 at the end of this article for details. All this imformation is called the BIOS Parameter Block and is used by DOS to control any disk-type device.

After the BIOS parameter block, we have the boot program. This, by the way, is where the jump instruction sent us to. The boot program can be a complete program, that looks for and loads the system files into memory. Or, in the case of PCTools and Nortons, just enough to display the message "Non-system disk."

Now to see the whole sector scroll by use:

D 0 L200

The extra L200 told Debug to display 200H bytes of information to the screen, non stop. At the end of this display you will see in the last two bytes the hex numbers 55 and AA. This is DOS' signature. It tells the computer that this is indeed a DOS disk and not one from some other operating system.

In any case, it is all this, that the Stoned virus over writes. The following is the first eight paragraphs of the Stoned virus:

```
2DE0:0000  EA 05 00 C0 07 E9 99 00-00 1A 05 00 C8 E4 00 80   . . . . . . . . . . . . . . . .
2DE0:0010  9F 00 7C 00 00 1E 50 80-FC 02 72 17 80 FC 04 73   . . : . . .P. . . r . . . . s
2DE0:0020  12 0A D2 75 0E 33 C0 8E-D8 A0 3F 04 A8 01 75 03   . . .u . 3 . . . . ? . . . A
2DE0:0030  E8 07 00 58 1F 2E FF 2E-09 00 53 51 52 06 56 57   . . . X . . . . . . SQR.VW
2DE0:0040  BE 04 00 B8 01 02 0E 07-BB 00 02 33 C9 8B D1 41   . . . . . . . . . . . 3 . . . A
2DE0:0050  9C 2E FF 1E 09 00 73 0E-33 C0 9C 2E FF 1E 09 00   . . . . . . s . 3 . . . . . . .
2DE0:0060  4E 75 E0 EB 35 90 33 F6-BF 00 02 FC 0E 1F AD 3B   Nu . . 5 . 3 . . . . . . . . ;
2DE0:0070  05 75 06 AD 3B 45 02 74-21 B8 01 03 BB 00 02 B1   .u . . ;E. t ! . . . . . . .
```

Not a pretty sight, ha! You will notice it has trashed everything, overwriting even the BIOS parameter block. Well that's not really true. What it has done, to be precise, is move it somewhere else. Now, a good virus killer like CLEAN will find the original boot sector and overwrite the virus with it. Sort of do unto other as they do unto you (well in most cases anyway). I did find a few that it just zeroed out. Not knowing the history of the disks I can only wonder why.

But suppose you don't have a disinfection program and you really need that floppy right now. Well, you can use good old trusty Debug. It is possible to locate the original boot sector just like CLEAN does and put it back where it belongs. To find it just search for the signature 55 AA. However, this would be time consuming and the method would be beyond the scope of this article. A quicker way is as follows. *WARNING Only use the following on INFECTED FLOPPY DISKS, NOT the HARD DRIVE. Use CLEAN when dealing with hard drives.* ☞

After making sure your system is free of any known viruses, it would be a waste of time disinfecting a disk only to infect it once more. Use the following method. Take a FORMATTED, VIRUS FREE DISK and place in drive A: and issue the following commands:

DEBUG L 0 0 0 1

Now, remove the disk and replace it with an INFECTED one. Next, write over the virus with the following command:

W 0 0 0 1

The W is Debug's command for Write. The following numbers are the same as the LOAD command. You now have a REPAIRED and VIRUS FREE boot sector, along with boot programs and error messages. If you have a number of disks to do, just hit F3 and the W command will reappear. If you are using DOSEDIT, use the usual key to repeat a command. Note that not all DOSEDIT programs work in debug.

Remember, if you have some non-standard formatted disks about, you will have to use a boot sector of the same type to overwrite any viruses on them. This is one more example on how Debug is the best program ever written and to make it even *more* attractive, it comes free with DOS.

Fig. 1

OFFSET	LENGTH	DESCRIPTION
03H	8 bytes	System ID
0BH	1 word	Number of bytes per sector
0DH	1 byte	Number of sectors per cluster
0EH	1 word	Number of sectors in reserved area
10H	1 byte	Number of copies of FAT
11H	1 word	Number of root directory entries
13H	1 word	Total Number of Sectors
15H	1 byte	DOS media type
16H	1 word	Number of sectors per FAT
18H	1 word	Number of sectors per track
1AH	1 word	Number of Heads
1CH	1 word	Number of Hidden Sectors

■ - Peter Doyle.

PC - 91

Well, another year, another Personal Computer Show has come and gone. PC '91, held at the Exhibitions Buildings, Melbourne, was rather impressive. There were a huge amount of exhibitors there and I took the chance to view some of the Desktop Publishing software and hardware. Vendors were also selling PCs at show special prices. For example, IAC PCs were offering a PC with a 165 mb ESDI hard disk for an extra $100 over the normal price of the PC with a 40 Mb hard disk. Pity I cannot afford a new PC...

The usual disk specials and other minor hardware specials such as mouses (mice?), and other desktop accessories were on offer.

We were on the lookout for hand scanners, but could only find 3 exhibitors who sold them, and they either didn't have them in stock at the show (they were taking orders) or we couldn't see them demo'ed. Now I don't know about you, but I don't purchase anything that can't be shown to me.

A couple of the lads bought some keyboard overlays for Wordperfect and other programs. Imagine their chagrin when we visited the RMIT book store later in the day, only to see the same overlays for a dollar cheaper! So much for Show specials...

If you haven't been to a PC expo before, then you would have enjoyed this one. However, there was not as much excitement as the previous shows had. PC '89 was probably the best one because of the new PC models, Windows release and so on.

I had arranged with the Exhibition orgnanisation to procure free tickets for the Group. I was able to get 15 tickets but about 2 weeks prior to the show they hadn't shown up. So I called back and re-ordered them. Sure enough, the next day they turned up. BUT, two days later another 15 tickets arrived in the mail. I handed these to Jenny at the neighborhood house to give to those interested. Apparently Matho (Graeme Matheson) had the same experience. So, we recieved about 50 tickets all up. I hope they were all put to good use.

Let's hope next year isn't just "more of the same".■

- Martin Taylor

Upgrading DOS

Have you ever had problems trying to ugrade to a later version of MS or PC DOS? Or are you unaware of how to do it? Well, hopefully I can explain how to do it successfully.

When you turn your PC on for the first time, you have to have what is refered to as a "System or DOS disk" in Drive A. However, if a hard disk is installed, then it needs to be "bootable". No, you don't kick it in the guts to get started!

A DOS disk has what are refered to as the *system files* located on the first track in what is called the "boot sector". These system files are known as **IBMBIO.COM** and **IBMDOS.COM** for PC DOS (IBM's version of DOS) and **MSDOS.SYS** and **IO.SYS** for MS DOS (Microsoft's version of DOS). These files tell the hardware the most rudimentary commands to get the system started. Once the boot procedure is commenced, the BIOS (Basic Input Output System) will count the memory, display a message such as "Phoenix BIOS Ver 3.10 10" or something similar. It does a hardware self-check to ensure everything is present (keyboard, etc) and then it will read the system files. Once this is done. then DOS becomes active and it will read the CONFIG.SYS, COMMAND.COM and AUTOEXEC.BAT files. After all this is done you will be presented with your DOS prompt or menu system or whatever.

Now, the original version of DOS was Ver. 1. It had limited commands and was rather crude. Then came Ver. 2, Ver. 3 and finally, Ver. 4. Each version had minor upgrades such as ver 2.01, 3.1, 3.2, 3.3, and 4.01. Mostly these were bug fixes or some extra feature or command was added. The major difference between DOS 3xx and DOS 4xx is that DOS 4 will support hard disks greater than 32 megabytes in size whereas the earlier versions won't.

If you are running DOS 3 and want to upgrade to DOS 4, you first have to find a dealer that will sell you DOS 4 as a standalone product. For some reason Microsoft, in their wisdom, will not allow the sale of DOS 4 to people by itself. It has to come with a computer. My experiences with trying to upgrade my copy of DOS is related in issue 2 (Dec, 90) of our Newsletter.

Ok, you have obtained a copy of DOS 4. It is not merely a matter of copying the accompanying files from the distribution disks to your DOS directory. You also have to upgrade the system files AND the file COMMAND.COM. This is because the various commands from different versions of DOS won't run together. For example, if you have the FORMAT.COM from DOS 3.1 still on the hard disk after ver. 3.3 is installed, as soon as you try to format a disk a message "incorrect DOS version" will appear.

Here, we decide whether we use the SYS command or whether we will reformat the hard disk. I will discuss the SYS command first.

We have the new DOS disk in Drive A. We need to boot the system FROM that disk. So, turn on the PC and with the disk in Drive A with the door closed, allow it to boot. When the A prompt "A>" appears, log the C drive. Now, delete the file COMMAND.COM in the root directory. Change to the DOS directory (CD\DOS) or wherever the DOS files are kept and prior to deleting them ensure that there are no utility files that don't come with DOS located there. If they are, it is a good idea to keep all these in a separate directory. With my system I have these in a directory called C:\UTILS and this dir is in the PATH. Now, delete all the DOS files in the DOS directory.

Now, type CD\. This will return you to the root directory of the hard disk. Log the A drive and then type this: **SYS C:** What this will do now is to transfer those hidden system files across to the hard disk and write them to the Boot Sector which is a section of track 0 where the PC looks for the system files so it can boot. If the system transfer is successful, then change to the DOS directory and copy all the DOS files across from the DOS distribution disks in Drive A:.

Now, ensure that the file COMMAND.COM in in the root directory and nowhere else. If found in any other directories it should be deleted as not only does it take up extra disk space there is a chance that it may be an incorrect version. If so, sometimes the program located in that directory will lockup or do weird things if it tries to read that copy of COMMAND.COM.

Now, edit the file CONFIG.SYS and place the following text in it as the last line:

SHELL=C:\COMMAND.COM /P /E:1024

The figure 1024 can be altered, as this merely increases the default DOS environment size from the default 256 bytes to 1024 bytes. This will allow you to have large PATH statements and other environment variables. Also this will tell DOS where to find COMMAND.COM. In this case, the root directory. Or if you wish to keep ☞

COMMAND.COM in the DOS directory, type this in the CONFIG.SYS:

SHELL=C:\DOS\COMMAND.COM /P /E:1024

Once all this has been done (takes about 5 mins), remove the DOS disk from Drive A and reboot the machine. If it boots successfully, type -VER at the DOS prompt. It should tell you this:

Microsoft Personal Computer DOS Version xxxx. (xxxx being the new version of DOS)

Now, if for some reason you cannot transfer the system from the DOS disk to the hard disk, you will probably have gotten the message "system too big to fit on destination disk". This means there may be a problem with how the original DOS was installed. If you know how to use a disk editor such as Norton's Diskedit, then you can make the hard disk bootable, or you can locate the hidden files, change their attributes FROM read-only, system and hidden by using XTREE PRO or something similar. Then you can delete these files and try again. *A word of warning. Before attempting to manually delete the hidden files, BACKUP the hard disk in case you have to reformat it.* Sometimes, this will be the only way you can successfully transfer the system files to the hard disk and it is done by booting off the new DOS disk and typing:

FORMAT C:/S

This will format the C Drive and copy the system files across.

Traditionally, the later the version of DOS, the more memory it takes up. For example, DOS 3.3 (what I use) leaves me with 592kb of RAM free after bootup. DOS 4 however, left me with about 560Kb free. This is why I use DOS 3. But DOS 5 is now available, and it will allows you to load all your device drivers and TSRs into what is refered to as High Memory. This frees up to about 630kb free for conventional DOS operations. The COMMAND.COM is also smaller. There are improved commands and extra ones that will allow you to MOVE files instead of COPYING them then DELETING the originals.

If you have extended memory then, DOS 5 is a must. But if you own an XT or AT with only 640 kb of RAM then you won't be able to use this feature of loading device drivers etc. into High Memory. But the new editor, the online help and extra commands alone will be worth the money.■

- Martin Taylor

Shareware Library Notice -

Due to the increasing popularity of the Shareware Library and the concurrent demands upon the Librarian, it has become necessary to implement the following:

1) Shareware orders will only be accepted Mondays, Wednesdays and Fridays *between the hours of 1:30 pm and 5:30 pm.*

2) Shareware programs can be collected from the Traralgon Neighbourhood House 48 hours after being ordered, or add $2.50 for postage.

3) All problems with Shareware programs (other than media errors) should be referred to the individual's DOS book.

4) Shareware programs *will not be demo'ed* prior to purchase.

5) Members will not go to Librarian's home unless invited.

It has become necessary to implement the above guidelines to enable the Shareware Librarian to have a personal life! Remember, Theresa Tate acts as our Shareware Librarian in *a voluntary capacity*, and it is unreasonable to expect her to drop whatever she may be doing because people keep dropping in unexpectedly for Shareware. Thank you for your consideration.

- Sheryl Taylor

Minutes of the Meeting 27/08/91

Apologies from Treasurer, Graeme Matheson.

Meeting opened at 7:40 pm.

Phil Carter introduced all members of the Committee to the general meeting. Minutes of the last meeting were read by Theresa Tate. Martin Taylor moved for acceptance of minutes, seconded by Ross Cheater. Motion carried unanimously.

Treasurer's Report read by Theresa. Motion to accept by Jim Peter, seconded by Paul Dzwonkowski. Motion carried by majority, with Jenny Poon voting against (an old tradition).

Secretary's Report was read by Theresa.

Reminder by Secretary that we are a non-profit organisation and that we must be seen to be such. Discussion of disposal of accumulated income proposed to meeting.

Trevor Smith suggested a PC for Shareware.

Ralph reminded all of the need of fast copying of disks.

Marty suggested second hand machine from Trading Post for approx. $800.

Paul suggested that dealers can supply AT for $1,100, VGA with 40 meg HD.

Theresa suggested PC for best money available.

Greg Beaver suggested 200 meg Hard Drive. General discussion ensued regarding the pros and cons of this.

Sheryl requested hard disk for Newsletter.

Steve Walton suggested two PCs - one for shareware, one for Newsletter.

Marty reminded Group that Shareware generates income and that it was necessary to hold back money for forthcoming bills.

Harold Turner put forward motion that a $1,500 ceiling be allocated for the purchase of a PC at the discretion of the Committee and that further, when funds become available, a Hard Drive be purchased for the Newsletter. Further, when funds become available, another PC be purchased for the Newsletter. Tony Stringer seconded the motion. It carried unanimously.

General discussion on best buys and prices in the Valley.

Peter Doyle advised the Group that he intends to buy a new PC and that he wishes to collect viruses for testing and curing.

Phil advised members that Scan 80 is still the current version.

Trevor Smith thanked the Group for free tickets to PC-91.

General discussion on IBM buying out Microsoft and associating with Apple.

Question from floor on Scan 75. Incompatible with other virus detection software.

Phil advised that he would be demonstrating a hand scanner after the meeting, and that Peter Doyle would be demo'ing an Ansi Bomb (early type of virus).

Eve asked for some help with Word Perfect. Blanks on spell checker. General offers of advice from the Group.

Marty advised about ribbon re-inking. Computer Assist in Moe, $5, MJ Computers $3.65

General warning about worn ribbons causing damage to print heads.

Paul advised that 1.4 meg disks available for $20 per box of 10.

Trevor Smith advised he had a supply of printer ribbons at $1.50 each, unknown media or type.

Meeting closed at 8:40 pm.

DOS TIPS

IF your hard disk hasn't got a volume label, such as HARDDISK or MYDISK, it's a good idea to give it one. Having a volume label will prevent you from accidentally formatting the hard disk, as the volume label will act as a kind of password to be entered prior to formatting the hard disk.

If you don't know whether you have a volume label or not, type, at the DOS prompt, **Vol**. The reply DOS gives you will indicate whether or not you have a volume label. If you do, OK. If not, then simply type **Label C:**. You will be prompted for up to an 11 character volume name of your choice. Enter in the name you have chosen, and voila! It now has a name (but don't go breaking any bottles of champagne over your PC!).

Now, if you DO type **Format C:**, you will be prompted for the volume name. If you enter the wrong one, DOS will say, "illegal volume name. Format aborted." It's a simple way of preventing a lot of heartache.■

- Martin and Sheryl Taylor

Letters To The Editor...
We encourage members to express opinions in the form of "Letters to the Editor". If you have a comment, problem, need advice or whatever, send it to 12 Clift St, Traralgon 3844.
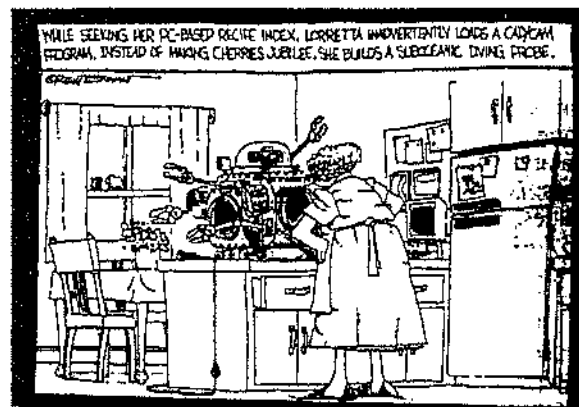
Classifieds

The Latrobe Valley Computer Users Group does not condone the un-authorised sale or exchange in any manner of commercial software. Only public domain and shareware may be freely exchanged within the group.

Non-commercial ads are free to members. For commercial ads, a $4 charge per 1/6 page per issue applies. To place an ad, ring (051) 76 1730.

☞ For Sale ☜

Star NX10 Printer. 9 pin dot matrix, 150 cps draft. Comes with manual and cable. $230 o.n.o. Phone (051) 76 1730

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Netcomm 1234SA Smart Modem 2400/1200 1200/75 (Discovery). Auto dial, auto answer, auto ranging. Tone and pulse dialing. Comes with manuals, software and cables. $430 ono. Phone (051) 76 1730.

★★★★★★★★★★★★★★★★★★★★★★★★

IBM Compatible XT 512k, 3.5" Disk Drive, Colour CGA Monitor, Games Port, Mouse and pad, Games and Programs, Users manual and GW Basic Users manaul. $1,000 o.n.o. Phone (051) 92 4396 after 5 pm.

★★★★★★★★★★★★★★★★★★★★★★★★

AST RAMpage expanded memory card for IBM XT and compatibles. Expandable to 2 meg (comes with 256k). Also, Desqview multitasking software and AST expanded memory utilities and all manuals. $150 o.n.o. Phone Ian at (051) 92 4289.

★★★★★★★★★★★★★★★★★★★★★★★★

This Space
Reserved for
You!

★★★★★★★★★★★★★★★★★★★★★★★★★

The next meeting of the Latrobe Valley Computer Users Group will be on 24/09/91, at 7:30 pm.